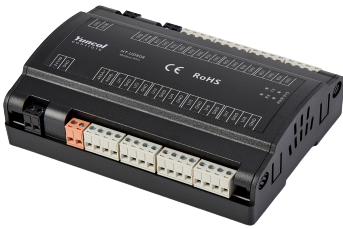


HT-UD808 UI:8 BO:8

Overview

The HT-UD808 features universal input points and communicates via the RS485 interface using the Modbus rtu protocol. It is designed for control applications requiring flexible I/O capacity. The product is built around a 32-bit ARM-core microcontroller, with 256 KB of Flash memory and 64 KB of RAM.



Applications

The HT-UD808 is suitable for use in: Air
handling units (AHU)
Fresh air units
Supply and exhaust fan units
Chilled water units
Collecting wells
Environmental monitoring systems

Power Supply

24V (AC/DC)

Device Address

Set via DIP switches (binary coding)

Inputs

0 - 10V DC (Range: 0 - 100)
Temperature NTC-10K
Dry contact

Outputs (B0)

AC24V/DC24V

Dimensions

150*110*51.5 (L*W*H)

Material

ABS

Mounting

35 mm DIN rail mounting

HT-UD808 UI:8 BO:8 Register Definition Description

Modbus rtu Register Address Description		
Register Address	Module port	Explanation
BI Point Input Status(0x02)Register Address		
10001	UI 1	Dry contact input
10002	UI 2	Dry contact input
10003	UI 3	Dry contact input
10004	UI 4	Dry contact input
10005	UI 5	Dry contact input
10006	UI 6	Dry contact input
10007	UI 7	Dry contact input
10008	UI 8	Dry contact input
AI Point Input Register(0x04)Register Address		
30001	UI 1	Input port(DC/0-10V)
30002	UI 2	Input port(DC/0-10V)
30003	UI 3	Input port(DC/0-10V)
30004	UI 4	Input port(DC/0-10V)
30005	UI 5	Input port(DC/0-10V)
30006	UI 6	Input port(DC/0-10V)
30007	UI 7	Input port(DC/0-10V)
30008	UI 8	Input port(DC/0-10V)
AI Point Input Register(0x04)Register Address		
30021	UI 1	Input port(NTC-10K)
30022	UI 2	Input port(NTC-10K)
30023	UI 3	Input port(NTC-10K)
30024	UI 4	Input port(NTC-10K)
30025	UI 5	Input port(NTC-10K)
30026	UI 6	Input port(NTC-10K)
30027	UI 7	Input port(NTC-10K)
30028	UI 8	Input port(NTC-10K)
AO Point Coil Status(0x01/0x05)Register Address		
1	BO1	Output port(AC24V/DC24V)
2	BO2	Output port(AC24V/DC24V)
3	BO3	Output port(AC24V/DC24V)
4	BO4	Output port(AC24V/DC24V)
5	BO5	Output port(AC24V/DC24V)
6	BO6	Output port(AC24V/DC24V)
7	BO7	Output port(AC24V/DC24V)
8	BO8	Output port(AC24V/DC24V)
AO Point Holding Register(0x03/0x06) (Baud rate/Address Code Setting)		
40011	/	Baud Rate Setting (9600/19200)
40012	/	Input port type setting

HT-UD808 UI:8 BO:8 Communication Specifications:

The Modbus RTU module has factory default communication parameters as follows: Baud rate: 19200. Data bits: 8. Stop bits: 1. Parity: None. Custom factory default baud rates are available upon request. Using the third-party tool ModbusPoll software, the values read from registers 40011 and 40012 correspond to the baud rate setting and input port type setting, respectively. The configured parameters will take effect after a power cycle. The device address is set via DIP switches.

I/O Port Configuration Guide:

For example, to configure input ports 1, 2, 5, and 6 as analog inputs, and the remaining ports as digital inputs: (Where 0 = digital input, 1 = analog input) Set register 40012 to 51 via the Modbus RTU protocol.

UI 8	UI 7	UI 6	UI 5	UI 4	UI 3	UI 2	UI 1	Convert to decimal
0	0	1	1	0	0	1	1	51

You can use the built-in calculator function on your computer to quickly convert binary numbers to decimal. Set the calculator to Programmer mode. To set a specific bit to 1, simply click the corresponding position to toggle it from 0 to 1, and vice versa, as shown in the figure below:

